

### **Abstract**

The invention relates to a drive unit of a motor vehicle provided with a cooling circuit, said drive unit comprising a hydrodynamic retarder having a rotor vane wheel and a stator vane wheel, the hydrodynamic retarder being arranged in the vehicle cooling circuit and the working medium of the retarder being the vehicle cooling medium. The inventive drive unit is characterized in that means for removing a pre-determined quantity of working medium from the cooling circuit during the changeover from braking mode to non-braking mode, and for supplying a pre-determined quantity of working medium into the cooling circuit during the changeover from non-braking mode to braking mode, are connected to the cooling circuit.